

ABSTRACT

Method and apparatus for integrated circuit debugging. Three debug access methods into an integrated circuit are provided to control the testing and debugging of program code, functional blocks and circuitry therein. The debug access includes a serial access, an I/O mapped parallel access, and a direct parallel access. The three debug accesses have varying levels of intrusiveness and test/debug efficiency. Depending upon whether the integrated circuit is unpackaged, packaged, coupled to a printed circuit board or found within a system, any one or more of the three debug accesses to debugging the integrated circuit can be utilized.